

# Rapid Tester®

RT-00001

*The 2 ml one minute test  
for flashpoint*



The Rapid Tester® is ideal for routine flash point testing:

**Quality Assurance** – Verify the formulation of liquid products with flammable ingredients.

**Compliance Testing** – Often required by regulatory agencies before transport or disposal of liquids.

**Fuel Dilution** – Determine the relative percentage of fuel in engine crank case oil to forecast the need for engine rebuilding.

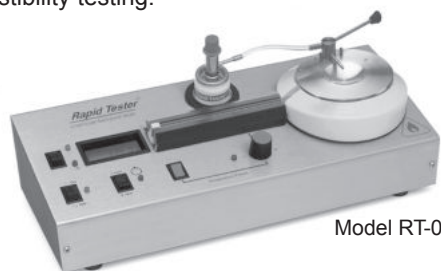
## Fast Test-Small Sample

Test time is only one minute with a 2 ml sample for flash points below 100°C (212°F). You can run ten tests with the Rapid Tester® in the time that it takes to perform just one by other methods. The 2 ml/4 ml sample is a fraction of the large sample required by other flash point methods. This reduces sampling and disposal problems while improving safety.

Digital circuitry permits simple adjustment and precise automatic regulation of test temperatures. Depress the Preset switch while turning the Temperature Control knob until the target temperature is displayed. Test cup temperature is automatically shown on the LCD display.

## Two Models

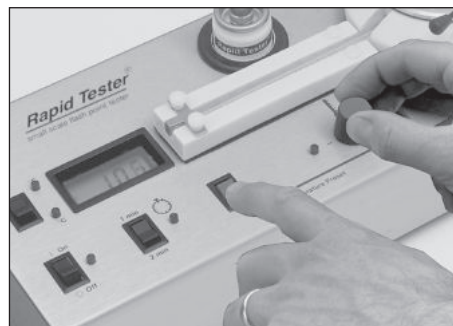
Closed cup models are used for flash point testing. The Rapid Tester® Open Cup Model RT-00002 is used for combustibility testing.



Model RT-00002

## Easy To Use

Follow these 3 simple steps for fast accurate flash point values:



1. Adjust display to the target test temperature.



2. Inject 2 ml or 4 ml sample material into the sample cup. Wait one or two minutes for vapor equilibrium to occur.



3. Introduce test flame - observe flash or no flash. Test complete.

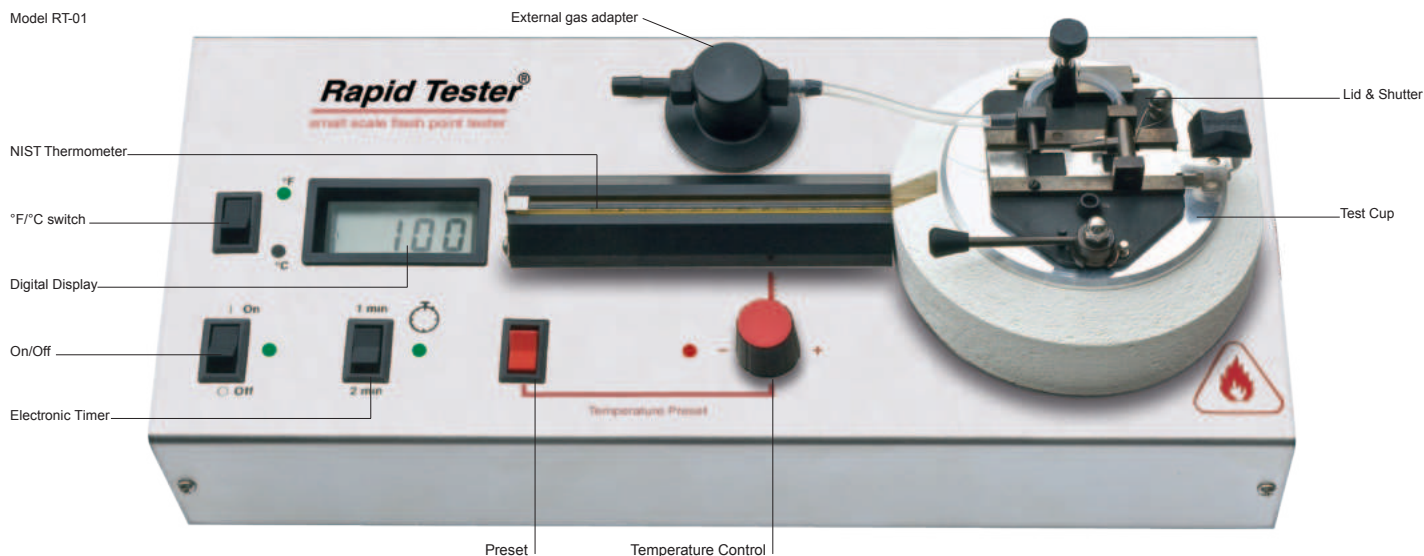
## Compare Results

Independent laboratory testing has demonstrated that the ASTM D 3828 test method utilized by the Rapid Tester® correlates well with other flash point methods. In ASTM D-2 Round Robin testing it was found that the ASTM D 3828 test method has the following correlation coefficients:

D 3828 (Rapid Tester®) vs. D 56 (Tag)	= 0.9949
D 3828 (Rapid Tester®) vs. D 93 (Pensky-Martens)	= 0.9943
D 56 vs. D 93	= 0.9926

**ERDCO®**

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## Specifications

The Rapid Tester® is a semiautomatic instrument for determining the flash point temperature/combustibility of flammable liquids. Closed cup test temperatures from ambient to 572°F (300°C) are automatically controlled by the digitally preset temperature circuitry. Integral LCD display, NIST traceable thermometer, disposable fuel tank and electronic timer are standard.

In accordance with:

ASTM D 3278	"Flash Point of Liquids by Small Scale Closed Cup Apparatus"
ASTM D 3828	"Flash Point by Small Scale Closed Tester"
ASTM D 4206	"Sustained Burning of Liquid Mixtures Using the Small Scale Open-Cup Apparatus"
BS 3900 Part A11	"Small Scale Test for Combustibility"
BS 3900 Part A13	"Rapid Test for Flash Point - Danger Classification"
BS 3900 Part A14	"Rapid Tests for Flash Point - Paints and Varnishes"
CPSC CFR 16-1500.43a	"Federal Hazardous Substances Act Regulations"
DOT CFR 49-173.115	"Flammable, Combustible, and Pyrophoric liquids, definitions"
IATA Resolution 618 Attachment A	Section 3.3.4 and 3.3.5
IP 303	Flash Point by Closed Rapid Tester"
ISO 3679	"Paints, Varnishes, Petroleum and Related Products - Determination of Flash Point - Rapid Equilibrium Method"
ISO 3680	"Paints, Varnishes, Petroleum and Related Products - Flash/No Flash Test - Rapid Equilibrium Method"
OSHA 29CFR 1910-106	"Program Directive 100"
OSHA 29CFR 1910-1200	"Hazard Communication"

## Performance (RT-01)

Repeatability:	0.5°@ 70°C 2.0°@150°C
Reproducibility:	2.0°@ 70°C 7.5°@150°C
Test Time:	1 min below 100°C 2 min above 100°C

## Characteristics

Cup Type:	RT-01 Closed RT-02 Open
Cup Material:	Aluminum (Stainless steel optional)
Dimensions:	15.0x3.4x6.3 in (38.1x8.64x16.25 cm)
Display:	LCD digital and NIST traceable mercury-in-glass thermometer
Net Weight:	10 lbs (4.6 Kg)
Power Requirements:	115v, 50/60 Hz 230v, 50/60 Hz
Sample Size:	2 ml below 100°C 4 ml above 100°C
Temperature Range	-30° to 300°C
<i>Sub-ambient testing requires cooling block RT-05505.</i>	(-22° to 572°F)

## Warranty:

Rapid Tester instrumentation is warranted against defects in materials and workmanship for one year from the date of shipment and will be repaired or replaced at manufacturer's option. This warranty is exclusive of shipping charges, consumable components, or misuse. The liability of the manufacturer is limited to such repair or replacement. No warranty of fitness for a particular purpose or liability for consequential or other damages shall be implied.

## Note:

This Data Sheet contains only a general description of the Rapid Flash Point Tester. While uses and performance capabilities are described, under no circumstances should the product be used except by qualified, trained personnel and not until the instructions, labels, or other literature accompanying it have been carefully read, understood and the precautions therein set forth followed. Only they contain the complete and detailed information concerning this product. Do not use in hazardous areas. The Manufacturer reserves the right to alter design and/or specifications without notice.